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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,694	10/31/2003	Frederick Henry Covely III	BCFT.1623	1902
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KEVIN FARRELL PIERCE ATWOOD ONE NEW HAMPSHIRE AVENUE PORTSMOUTH, NH 03801			EXAMINER KANG, INSUN	
			ART UNIT 2193	PAPER NUMBER
			MAIL DATE 04/14/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/698,694

Applicant(s)

COVELY, FREDERICK HENRY

Examiner

INSUN KANG

Art Unit

2193

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2009 and 07 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-13 and 15-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-13 and 15-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responding to amendment filed on 1/8/2009 and 4/7/2008.
2. Claims 1, 3-13, and 15-20 are pending in the application.

Specification

3. The object to the specification has been withdrawn due to amendment.

Claim Rejections - 35 USC § 101

4. The rejection to claim 1-11 has been withdrawn due to amendment to the claims.

Claim Objections

5. The objection to claim 1-11 has been withdrawn due to amendment to the claims.

Claim Rejections - 35 USC § 112

6. The rejection to claim 1-20 has been withdrawn due to amendment to the claims.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1 and 3-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota et al. (US Pub. No. 2005/0114757) hereafter Sahota, in view of Anuszczyk et al. (US

2003/0110253) hereafter Anuszczyk, and further in view of Cohen et al. (US 7,107,535) hereafter Cohen.

Per claim 1:

Sahota discloses:

- A system ...for manipulating at least one existing website displayable over the computer network, a processor portion and a memory portion...accessing the at least one website as directed by a user of the system (i.e. "system...for acquiring and transforming existing ...HTML content...for display and execution," abstract)

- tracing API calls by intercepting associated parameters and Internet Protocol network event data obtained from one or more application programming interfaces while accessing the at least one existing website (i.e. "Agent spider 207 accesses content using Internet Standard protocols...and other platform specific APIs...to read and transform the structure and content of any given page," 0059; "The content acquisition subsystem of the agent spider is flexible and new acquisition modules can be easily plugged in...to locate, acquire and convert content dynamically," page 5, 0059)

Sahota does not explicitly teach that filtering the Internet Protocol network event data (page 5, 0059). However, Anuszczyk discloses such filtering was known at the time the invention was made to "reduce the amount of information transmitted (i.e. 0113)." Therefore, it would have been obvious for one having ordinary skill in the art to modify Sahota's disclosed system at the time applicant's invention was made to incorporate the teachings of Anuszczyk. The modification would be obvious because one having ordinary skill in the art would be

motivated to filter out any unnecessary event data traced by the Agent spider so that network overhead can be reduced in Sahota.

Sahota further teaches automatically generating a source code from the traced and filtered Internet Protocol network event data that is executable by the processor portion- an agent spider program and generating sources from XML extract using XSL (i.e. page 6, 0068 and 0069). Sahota does not explicitly teach that automatically generating executable software robot that mimics the user using a web browser to access the at least one existing website. However, as described in the instant specification, the automatic code generation is performed via XSL transformation of XML (page 30). The instant specification is silent regarding to the specific implementation of such automatic code generation. Nonetheless, Sahota also discloses XSL that transforms the XML extract into other source formats would allow the XML file to be transformed in any other code (i.e. page 6, 0068 and 0069). Therefore, it would have been obvious for one having ordinary skill in the art to modify Sahota's disclosed system at the time applicant's invention was made to generate agent spider code from the XML extract by XSL for manipulation of the existing websites on behalf of users.

Sahota does not explicitly teach the software robot stored in the memory portion for execution by the processor portion when an end user requests playback. However, Cohen discloses such a playback function by a web robot was known at the time the invention was made to track user activity and construct sessions of interaction with the web site (i.e. col. 4 lines 39-41). Therefore, it would have been obvious for one having ordinary skill in the art to modify Sahota's disclosed agent spider system at the time applicant's invention was made to incorporate the teachings of Cohen. The modification would be obvious because one having ordinary skill in

the art would be motivated to use HTTP logs to record and track user activity and construct sessions of interaction with the web site to playback the session when a user request as taught by Cohen (col. 4 lines 39-41).

Per claim 3:

Sahota further discloses:

- the Internet Protocol network event data is obtainable from a group of APIs consisting of Winsock API, Microsoft WinInet API, Microsoft shell API, Microsoft security API, Microsoft User API, Microsoft Active Directory API, Microsoft HTML API and Microsoft DOM API(i.e. the agent spider, page 5, 0058; page 8, 0093, 0090, 0095) .

Per claim 4:

Sahota discloses that the browser can be IE (i.e. page 8, 0095): Therefore, it would be obvious that the agent spider in Sahota can trace IP network event data running on Microsoft Windows operating systems.

Per claim 5:

Sahota discloses: the IP network even data comprises data passed to and from a website browser application and/or a non-website browser application (i.e. page 8, 0095).

Per claim 6:

Sahota further discloses:

- filtering is adapted for removal of redundant and useless IP network event data passed to and from the API calls (i.e. page 7, 0076):

- removing network management packets that are acknowledgements and retries (i.e. page 9, 0103)
- collating IP packets into single HTTP based messages; and collating HTTP based messages into single records of content objects, wherein the content objects comprise HTML, images, audio, and other HTTP content (i.e. page 3, 0039; page 9, 0099,0103, 0104, 0108; page 10, 0115).

Per claim 7:

Sahota further discloses:

- analyzing the API calls and associated parameters and Internet Protocol network event data passed to and from the API calls (i.e. page 9, 0103; page 7, 0076)
- producing an XML extract file comprising an XML record for each content object in the temporal order the receipt (i.e. page 8, 0092, 0093)
- an XML redirect record and added redirect information (i.e. page 5, 0059)
- an XML record for cookie reads; an XML record for cookie writes (i.e. page 8, 0093);
- an XML record for user navigation events (i.e. page 7, 0081);
- an XML record for HTTP header information (i.e. page 8, 0093);
- one or more management information records relating to the API calls and associated parameters and IP network event data passed to and from the API calls (i.e. page 5, 0059; page 8, 0097).

Per claim 8:

Sahota further discloses:

- transforming XML extract file into executable source code via XSL (i.e. page 6, 0068, 0069).

Per claim 9:

Sahota further discloses:

- using a computer language to parse the XML extract file (i.e. page 7, 0076; page 2, 0027; page 3, 0040).

Per claim 10:

Sahota further discloses:

- XSL transforms the XML extract file into source code written in a programming language selected from a group consisting of Java, JavaScript, Visual Basic, Cold Fusion, C/C++, Pascal and a plurality of other computer languages (i.e. page 4, 0048; page 6, 0068,0069).

Per claim 11:

Sahota further discloses: the software robot is adapted to interface with the at least one existing website and automatically manipulate the at least one existing website during use (i.e. the agent spider, page 5, 0058) .

9. Claims 12, 13, 15, 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota et al. (US Pub. No. 2005/0114757) hereafter Sahota, in view of Cohen et al. (US 7,107,535) hereafter Cohen and further in view of Anuszczyk et al. (US 2003/0110253) hereafter Anuszczyk.

Per claim 12:

Sahota discloses:

- manipulating an existing website in communication with a computer network, providing a system also in communication with the computer network comprising a processor portion and a memory portion having executable steps stored thereon for execution by the processor portion, wherein said executable steps comprise (i.e. “acquiring and transforming existing ...HTML content...for display and execution,” abstract)
- tracing API calls between the system and the existing website and associated parameters and data associated with Internet Protocol (IP) network events passed to and from the API calls when a system user accesses the existing website (i.e. “The content acquisition subsystem of the agent spider is flexible and new acquisition modules can be easily plugged in...to locate, acquire and convert content dynamically,” page 5, 0059);

Sahota does not explicitly teach tracing API calls in temporal order. However, Cohen discloses it was known at the time the invention was made to track user activity and construct sessions of interaction with the web site by time determined by using the time stamp of the access recorded in the HTTP log (col. 4 lines 39-51). Therefore, it would have been obvious for one having ordinary skill in the art to modify Sahota’s disclosed agent spider system at the time applicant’s invention was made to incorporate the teachings of Cohen. The modification would be obvious because one having ordinary skill in the art would be motivated to harvest and acquire the web content in Sahota to track the user activity and construct sessions of interaction in temporal order by using the timestamp recorded in the HTTP log of Cohen.

Sahota does not explicitly teach that filtering the Internet Protocol network event data. However, Anuszczyk discloses such filtering was known at the time the invention was made to “reduce the amount of information transmitted (i.e. 0113).” Therefore, it would have been obvious for one having ordinary skill in the art to modify Sahota’s disclosed system at the time applicant’s invention was made to incorporate the teachings of Anuszczyk. The modification would be obvious because one having ordinary skill in the art would be motivated to filter out any unnecessary event data traced by the Agent spider so that network overhead can be reduced in Sahota.

Sahota further discloses analyzing the data to produce an extract file (i.e. XML, page 3, 0041,0042)

Sahota teaches an agent spider program and generating sources from XML extract using XSL (i.e. page 6, 0068 and 0069). Sahota does not explicitly teach that automatically generating a software robot that comprises executable source code derived from the extract file, wherein executing the source code parsed from the extract file automatically instructs the system to mimic interactions between the system user and the existing website; executing steps i) through iv) thereby automatically generating a software robot that manipulates the existing website by automatically instructing the system to mimic interactions between the system user and the existing website. However, as described in the instant specification, the automatic code generation is performed via XSL transformation of XML (page 30). The instant specification is silent regarding to the specific implementation of such automatic code generation. Nonetheless, Sahota also discloses XSL that transforms the XML extract into other source formats would allow the XML file to be transformed in any other code (i.e. page 6, 0068 and 0069).

Therefore, it would have been obvious for one having ordinary skill in the art to modify Sahota's disclosed system at the time applicant's invention was made to generate agent spider code from the XML extract by XSL for manipulation of the existing websites on behalf of users.

Sahota does not explicitly teach playback on the IP network level at the request of an end user. However, Cohen further discloses such a playback function by a web robot was known at the time the invention was made to track user activity and construct sessions of interaction with the web site (i.e. col. 4 lines 39-41). Therefore, it would have been obvious for one having ordinary skill in the art to modify Sahota's disclosed agent spider system at the time applicant's invention was made to incorporate the teachings of Cohen. The modification would be obvious because one having ordinary skill in the art would be motivated to use HTTP logs to record and track user activity and construct sessions of interaction with the web site to playback the session when a user request as taught by Cohen (col. 4 lines 39-41).

Per claim 13:

Sahota further discloses:

- recording to the memory portion the API calls and associated parameters and data passed to and from the API calls (i.e. page 6, 0063; page 5, 0058).

Per claim 15:

Sahota further discloses:

- the generating step comprises prompting an end user to hard code the source code from the XML extract file (i.e. page 6, 0069; page 3, 0040; page 2, 0027).

Per claim 16:

Sahota further discloses:

- automating the derivation of source code from the XML extract file (i.e. page 6, 0068).

Per claim 18:

Sahota further discloses:

- integrating the executable steps into a website browser as a plug-in (i.e. page 5, 0059).

Per claim 20:

Sahota further discloses:

- displaying a selectable button in a web browser plug-in that automates completion of multiple forms without further user intervention (i.e. page 9, 0100).

10. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sahota et al. (US Pub. No. 2005/0114757) hereafter Sahota, in view of Cohen et al. (US 7,107,535) hereafter Cohen, further in view of Anuszczyk et al. (US 2003/0110253) hereafter Anuszczyk, and still further in view of Miller et al. (US Patent 7,231,606) hereafter Miller.

Per claim 17:

Sahota further discloses:

- interfacing with the existing website to automatically file-in one or more forms on a web page (i.e. page 6, 0068)
- obtain information previously unattainable (i.e. page 8, 0095; page 9, 0100,0125)

Sahota, Cohen, and Anuszczyk do not explicitly teach performing system testing of a website. However, Miller teaches testing a website was known in the pertinent art, at the time applicant's invention was made, to confirm website page content and perform other validation (i.e. col. 17, lines 53-67). It would have been obvious for one having ordinary skill in the art to modify Sahota's system combined with Cohen and Anuszczyk to incorporate the teachings of Miller. The modification would be obvious because one having ordinary skill in the art would be motivated to validate web page contents as suggested by Miller.

- Sahota further discloses monitor the existing website for change (i.e. page 8, 0095; page 9, 0100, 0125).

Per claim 19:

Sahota further discloses integrating the software into a web browser as an extension wherein the integrated software may display HTTP header parameters and other data (i.e. page 8, 0093, 0095).

Sahota, Cohen and Anuszczyk do not explicitly teach that the source code is adapted for interactive stepping through on a page-by-page or event-by-event basis so that debug messages adapted for providing full interactive debugging capability to the source code, HTTP header parameter, and other data are displayed in the plug-in. However, Miller teaches such an integrated spider with debugging was known in the pertinent art, at the time applicant's invention was made, to present debug message logs to a user (i.e. col. 5 lines 59-67). It would have been

obvious for one having ordinary skill in the art to modify Sahota's system combined with Cohen and Anuszczyk to incorporate the teachings of Miller. The modification would be obvious because one having ordinary skill in the art would be motivated to provide debug information by displaying a message log as suggested by Miller.

Response to Arguments

11. Applicant's arguments with respect to claims 1,3-13, and 15-20 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore, in response to Applicant's arguments filed on 4/7/2008 that have been fully considered but they are not persuasive: the applicant states that Sahota and Miller do not disclose tracing API calls in temporal order between the system and the existing website and associated parameters and data associated with Internet Protocol (IP) network events passed to and from the API calls when a system user accesses the existing website (i.e. "The content acquisition subsystem of the agent spider is flexible and new acquisition modules can be easily plugged in...to locate, acquire and convert content dynamically," page 5, 0059) and generating a software robot that comprises executable source code for automatically mimicking interactions between a user and a website. The IP network layer trace is a critical component with which the present invention produces source code that mimics user interactions with an existing website (remark, 34-36). The applicant further states that Sahota does not teach, motivate or suggest the transformation of a markup language to executable source code (remark 37-41).

In response, first, the instant invention is directed to a software that traces a web browser such as Internet Explore...Netscape Navigator (page 27) using an API to intercept the calls and parameters to produce source code via an XSL transformation of the output from the tracing

represented in XML referred to as the Extract (page 8, 29-30). The instant specification does not describe the detailed implementation of such tracing, filtering, and automatically generating source code recited in the claims. However, Sahota specifically teaches that an Agent spider that locates, harvest, convert, and deliver existing Internet content such as HTTP protocol and the internet content is converted to an XML (0052, 0059). The agent spider accesses the internet content using Internet standard protocols such as HTTP and other platform specific APIs and acquire website changes and transactions from existing sources responding to events (0059) where the Agent spider navigates a website's structure and locates a particular URI to extract information content and media assets (0058). Sabota also discloses that an XSL transforms XML data from one format into another (0069). Therefore, as no distinct implementations of the automatic code generation are recited in the claims and described in the instant specification, applicant's argument above is not persuasive.

The applicant further states the logs produced by Miller thus relate to load testing a website. These are non-analogous to the debugging function of the present invention which allows for debugging of the automatically generated source code (remark, 41).

In response, first, the claims do not describe the specific debugging method. The instant specification states that the "web browser plug provides the ability to do most common debugging functions on the generated source code, while viewing the affect of the source code statements in the web browser itself (page 22)." Miller discloses a test-enabled browser coupled to the web so that they are able to access the website under test producing a message log, and various reports. The source code of a webpage can be tested by the test-enabled browser.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSUN KANG whose telephone number is (571)272-3724. The examiner can normally be reached on M-R 7:30-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lewis A. Bullock, Jr. can be reached on 571-272-3759. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair->

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/Insun Kang/

Examiner, Art Unit 2193